

Storm Analysis

As of 08/28/2015 00:00 AST, water levels along the coasts of the U.S. Virgin Islands and Puerto Rico are slightly elevated and range between 0.7 and 1.0 feet above tidal predictions. Wind speeds are increasing with gusts over 40 kts measured at Esperanza, Vieques Island and Yabucoa Harbor, PR. Barometric pressure has begun to level off at most locations.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

NWS NATIONAL HURRICANE CENTER MIAMI FL

TROPICAL STORM ERIKA ADVISORY NUMBER 13

1100 PM AST THU AUG 27 2015

...TROPICAL STORM FORCE WINDS AFFECTING THE U.S VIRGIN ISLANDS AND APPROACHING PUERTO RICO...

WATCHES AND WARNINGS

Analyst: PFF

A Tropical Storm Warning is in effect for...

- * Puerto Rico
- * Vieques
- * Culebra
- * U.S. Virgin Islands

Interests elsewhere in the Dominican Republic and in Haiti should monitor the progress of Erika.

For storm information specific to your area in the United States, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office. For storm information specific to your area outside the United States, please monitor products issued by your national meteorological service.

DISCUSSION AND 48-HOUR OUTLOOK

At 1100 PM AST (0300 UTC), the center of Tropical Storm Erika was located near latitude 16.6 North, longitude 65.3 West or ABOUT 85 MI...135 KM SSW OF ST. CROIX and ABOUT 135 MI...215 KM SSE OF SAN JUAN PUERTO RICO. Erika is moving toward the west near 17 mph (28 km/h). A turn to the west-northwest is anticipated on Friday, and this general motion is expected to continue through Saturday. On the forecast track, the center of Erika will move near Puerto Rico during the next several hours and move near or over the Dominican Republic on Friday.

Maximum sustained winds are near 45 mph (75 km/h) with higher gusts.

Little change in strength is forecast during the next 48 hours.

Tropical storm force winds extend outward up to 140 miles (220 km) from the center. St. Croix recently reported a wind gust to 62 mph (100 km/h).

The estimated minimum central pressure is 1008 mb (29.77 inches).

HAZARDS AFFECTING LAND

WIND: Tropical storm conditions are affecting the Virgin Islands and will spread across Puerto Rico during the next several hours. These conditions should spread westward across portions of the Dominican Republic on Friday, and the southeastern Bahamas and Turks and Caicos Islands late Friday.

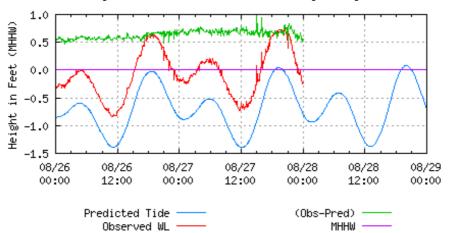
RAINFALL: Erika is expected to produce total rainfall accumulations of 4 to 8 inches with maximum amounts of 12 inches possible across portions of the Leeward Islands, the Virgin Islands, Puerto Rico, the Dominican Republic and Haiti, the Turks and Caicos Islands, and the southeastern Bahamas through Saturday. These rains could cause life-threatening flash floods and mud slides.

Forecaster Avila

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: <u>Isabel Segunda</u>, <u>Vieques Island</u> - <u>Water Level</u>, <u>Isabel Segunda</u>, <u>Vieques Island</u> - <u>Winds</u>, <u>Esperanza</u>, <u>Vieques Island</u> - <u>Water Level</u>, <u>Esperanza</u>, <u>Vieques Island</u> - <u>Water Level</u>, <u>Fajardo</u> - <u>Water Level</u>, <u>Yabucoa Harbor</u> - <u>Winds</u>, <u>Yabucoa Harbor</u> - <u>Water Level</u>, <u>Yabucoa Harbor</u> - <u>Winds</u>, <u>Magueyes Island</u> - <u>Water Level</u>, <u>Magueyes Island</u> - <u>Winds</u>, <u>Mona Island</u> - <u>Water Level</u>, <u>Charlotte Amalie</u> - <u>Water Level</u>

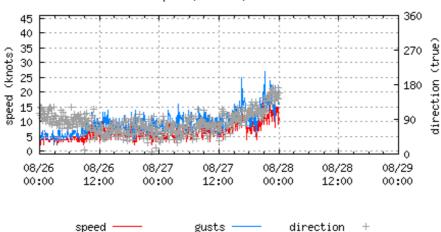
NOAA/NOS/CO-OPS <u>9752619 Isabel Segunda</u>, <u>Vieques Island</u>, <u>PR</u>
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 08/28/2015 00:06 (AST). Data relative to MHHW Observed: -0.24 ft. Predicted: -0.82 ft. Residual: 0.58 ft.

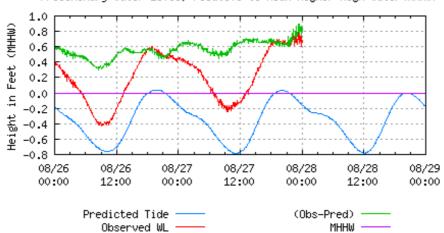
Historical Maximum Water Level: n/a Next High Tide: 08/28/2015 06:51 (AST), -0.41 ft.

NOAA/NOS/CO-OPS 9752619 Isabel Segunda, Vieques Island, PR Wind Speed / Gusts / Direction



Last Observed Sample: 08/28/2015 00:06 (AST) Wind Speed: 14 knots Gusts: 20 knots Direction: 135° T

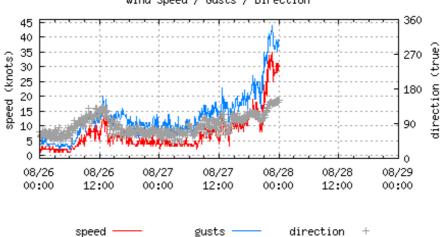
NOAA/NOS/CO-OPS <u>9752695 Esperanza</u>, <u>Vieques Island</u>, <u>PR</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 08/28/2015 00:06 (AST). Data relative to MHHW Observed: 0.76 ft. Predicted: -0.16 ft. Residual: 0.92 ft. Historical Maximum Water Level: Aug 22 2011, 0.99 ft.

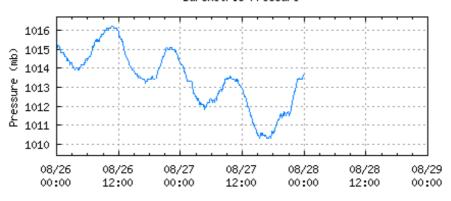
Next High Tide: 08/28/2015 20:17 (AST), -0.01 ft.

NOAA/NOS/CO-OPS <u>9752695 Esperanza</u>, <u>Vieques Island</u>, <u>PR</u> Wind Speed / Gusts / Direction



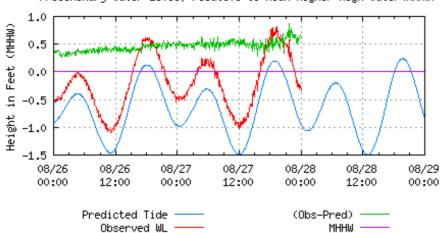
Last Observed Sample: 08/28/2015 00:06 (AST) Wind Speed: 29 knots Gusts: 35 knots Direction: 155° T

NOAA/NOS/CO-OPS <u>9752695 Esperanza, Vieques Island, PR</u> Barometric Pressure



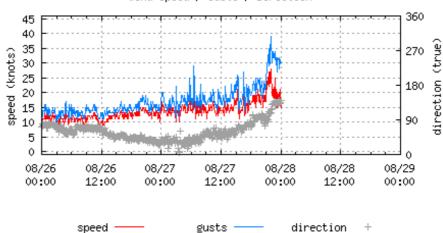
barometric pressure ——
Last Observed Sample: 08/28/2015 00:06 (AST)
Barometric Pressure: 1013.6 mb

NOAA/NOS/CO-OPS <u>9753216 Fajardo, PR</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



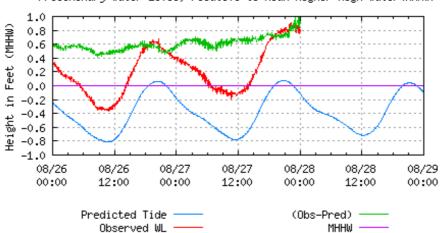
Last Observed Sample: 08/28/2015 00:06 (AST). Data relative to MHHW Observed: -0.42 ft. Predicted: -0.97 ft. Residual: 0.55 ft. Historical Maximum Water Level: Aug 30 2010, 0.84 ft. Next High Tide: 08/28/2015 06:44 (AST), -0.20 ft.

NOAA/NOS/CO-OPS <u>9753216 Fajardo</u>, <u>PR</u> Wind Speed / Gusts / Direction



Last Observed Sample: 08/28/2015 00:06 (AST) Wind Speed: 17 knots Gusts: 29 knots Direction: 137° T

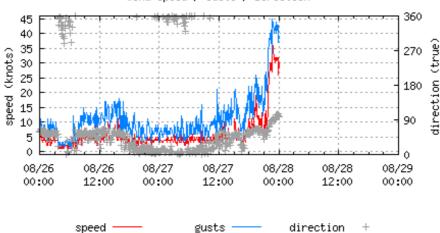
NOAA/NOS/CO-OPS <u>9754228 Yabucoa Harbor, PR</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 08/28/2015 00:06 (AST). Data relative to MHHW Observed: 0.78 ft. Predicted: -0.13 ft. Residual: 0.91 ft.

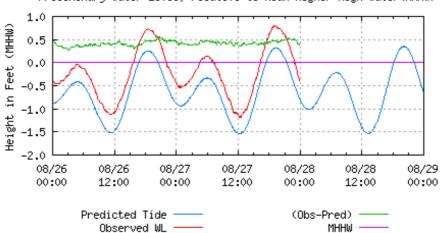
Historical Maximum Water Level: n/a Next High Tide: 08/28/2015 21:14 (AST), 0.04 ft.

NOAA/NOS/CO-OPS <u>9754228 Yabucoa Harbor, PR</u> Wind Speed / Gusts / Direction



Last Observed Sample: 08/28/2015 00:06 (AST) Wind Speed: 30 knots Gusts: 38 knots Direction: 100° T

NOAA/NOS/CO-OPS <u>9755371 San Juan, PR</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 08/28/2015 00:00 (AST). Data relative to MHHW Observed: -0.40 ft. Predicted: -0.80 ft. Residual: 0.40 ft. Historical Maximum Water Level: Sep 18 1989, 2.77 ft. Next High Tide: 08/28/2015 07:00 (AST), -0.21 ft.

45 40

35

30 25

00:00

08/26

12:00

08/27

00:00

speed (knots)

08/28

00:00

08/29

00:00

08/28

12:00

speed ____ gusts ___ direction + Last Observed Sample: 08/28/2015 00:00 (AST)

08/27

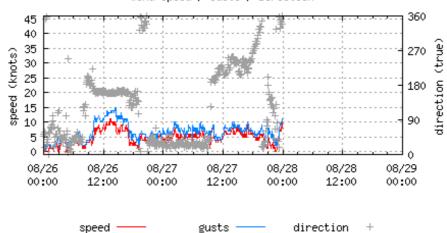
12:00

Wind Speed: 16 knots Gusts: 20 knots Direction: 109° T

NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR Preliminary Water Level, relative to Mean Higher High Water(MHHW) 0.8 Height in Feet (MHHW) 0.6 0.4 0.2 0.0 0.2 -0.4-0.6 08/26 08/26 08/27 08/27 08/28 08/28 08/29 00:00 12:00 00:00 12:00 00:00 12:00 00:00 Predicted Tide (Obs-Pred) Observed WL MHHW

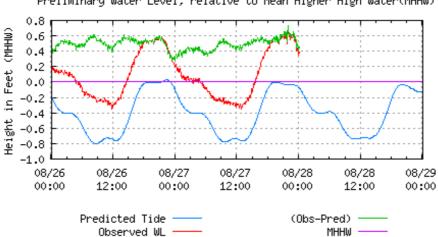
Last Observed Sample: 08/28/2015 00:00 (AST). Data relative to MHHW Observed: 0.57 ft. Predicted: 0.14 ft. Residual: 0.43 ft. Historical Maximum Water Level: Sep 22 1998, 1.60 ft. Next High Tide: 08/28/2015 21:35 (AST), 0.23 ft.

NOAA/NOS/CO-OPS <u>9759110 Magueyes Island, PR</u> Wind Speed / Gusts / Direction



Last Observed Sample: 08/28/2015 00:00 (AST) Wind Speed: 5 knots Gusts: 10 knots Direction: 15° T

NOAA/NOS/CO-OPS <u>9759938 Mona Island, PR</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



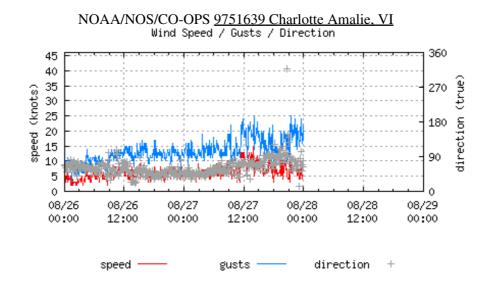
Last Observed Sample: 08/28/2015 00:06 (AST). Data relative to MHHW Observed: 0.39 ft. Predicted: -0.07 ft. Residual: 0.46 ft. Historical Maximum Water Level: Dec 23 2010, 1.26 ft. Next High Tide: 08/28/2015 20:07 (AST), -0.03 ft.

NOAA/NOS/CO-OPS 9751639 Charlotte Amalie, VI Preliminary Water Level, relative to Mean Higher High Water(MHHW) 1.0 Height in Feet (MHHW) 0.8 0.6 0.4 0.2 0.0 -0.2 -0.4 -0.6 -0.8 08/26 08/29 08/26 08/27 08/27 08/28 08/28 12:00 00:00 00:00 12:00 00:00 12:00 00:00 (Obs-Pred) Predicted Tide

Last Observed Sample: 08/28/2015 00:00 (AST). Data relative to MHHW Observed: 0.65 ft. Predicted: -0.09 ft. Residual: 0.74 ft. Historical Maximum Water Level: Sep 16 1995, 2.93 ft. Next High Tide: 08/28/2015 05:43 (AST), -0.24 ft.

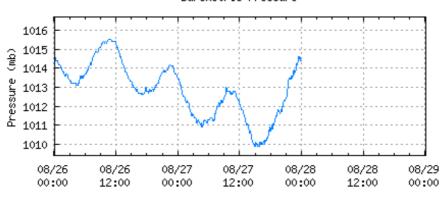
MHHW

Observed WL



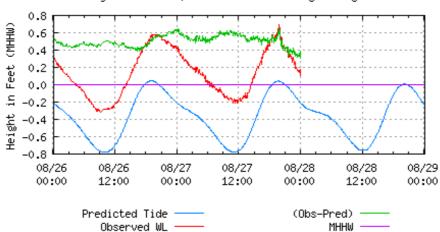
Last Observed Sample: 08/28/2015 00:00 (AST) Wind Speed: 8 knots Gusts: 17 knots Direction: 64° T

NOAA/NOS/CO-OPS <u>9751639 Charlotte Amalie, VI</u> Barometric Pressure



barometric pressure ——
Last Observed Sample: 08/28/2015 00:00 (AST)
Barometric Pressure: 1014.4 mb

NOAA/NOS/CO-OPS <u>9751364 Christiansted Harbor, St Croix, VI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 08/28/2015 00:00 (AST). Data relative to MHHW Observed: 0.10 ft. Predicted: -0.21 ft. Residual: 0.31 ft. Historical Maximum Water Level: Oct 16 2008, 1.17 ft. Next High Tide: 08/28/2015 20:12 (AST), 0.01 ft.

Latest Water Level Observations on MHHW

Station II	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
9752619	Isabel Segunda, Vieques Island, PR	08/28/2015 00:06 (AST)	-0.24 ft	-0.82 ft	0.58 ft	0.77 ft
9752695	Esperanza, Vieques Island, PR	08/28/2015 00:06 (AST)	0.76 ft	-0.16 ft	0.92 ft	0.79 ft
9753216	Fajardo, PR	08/28/2015 00:06 (AST)	-0.42 ft	-0.97 ft	0.55 ft	0.81 ft
9754228	Yabucoa Harbor, PR	08/28/2015 00:06 (AST)	0.78 ft	-0.13 ft	0.91 ft	0.94 ft
9755371	San Juan, PR	08/28/2015 00:00 (AST)	-0.40 ft	-0.80 ft	0.40 ft	0.81 ft
9759110	Magueyes Island, PR	08/28/2015 00:00 (AST)	0.57 ft	0.14 ft	0.43 ft	0.70 ft
9759938	Mona Island, PR	08/28/2015 00:06 (AST)	0.39 ft	-0.07 ft	0.46 ft	0.71 ft
9751639	Charlotte Amalie, VI	08/28/2015 00:00 (AST)	0.65 ft	-0.09 ft	0.74 ft	0.95 ft
9751364	Christiansted Harbor, St Croix, VI	08/28/2015 00:00 (AST)	0.10 ft	-0.21 ft	0.31 ft	0.69 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce